

FOREST NEWS

Georgia ForestWatch Quarterly Newsletter Spring 2006

Apples and Oranges and Clear Cutting for Golden-Winged Warblers

By Jim Walker : District Leader

How many apples is an orange worth? As everyone knows, this is an unfair question; you cannot compare apples and oranges. But why not? They are both fruits, good to eat and about the same size. It would seem fairly easy to compare them with respect to many components and characteristics, but the ultimate decision as to their relative worth still depends on subjective preferences.

Here is another tricky question: how many trees is a songbird worth? While this question may be even more unanswerable than the apples/oranges one, it is not abstract but typical of the kind of practical decisions that the Forest Service is forced (or volunteers) to make. How many trees would you cut down to save one songbird? If you accept the premise that this question is worth investigating as a practical matter, you will no doubt want to know exactly what kind of birds and what kind of trees we are talking about.

Golden-winged warbler. While this neotropical migrant species is not rare or endangered, it is generally accepted that the golden-winged warbler population is declining in parts of its range, especially at the extreme southern limit, in the mountains of north Georgia. On the other hand, its range is expanding northward into Canada. The reasons for this decline are not known for sure but may include climate change, destruction of wintering grounds in Central and South America and/or loss of preferred habitat in the Chattahoochee National Forest. The preferred habitat for this species is early successional, such as shrubby regenerating forest in abandoned fields, with the additional requirement at the southern edge of its range that this habitat must be close to or above 3,000 feet of elevation. This type of habitat peaked almost a century ago and has become increasingly less common as logged or cultivated land has returned to forest, particularly since 1999, when most clear cutting of the Chattahoochee National Forest was halted. Nowadays, such habitat is created naturally by disturbances such as hurricanes Opal and Ivan or artificially by wildlife management practices that mimic clear cuts.

But the golden-winged warbler faces another serious problem: competition and hybridization with its close relative, the blue-winged warbler. In areas where the ranges of these two warbler species overlap, as they do in north Georgia, the blue-winged tends to outcompete its golden-winged cousin, and the hybridization process usually results in domination of blue-winged phenotypes in a relatively short time.

The largest known concentration of golden-winged warblers in north Georgia is in and around Ledford Gap, just below Brawley mountain, in an area that suffered significant windfall from hurricane Opal in 1995 and was later salvage-logged. In 2002, Nathan Klaus, a wildlife biologist with the Georgia Department of Natural Resources, found “at least 3 territories, 3 males, 1 female, 5 fledglings, plus 2 adult hybrids” there.

In hope of increasing this population, the Forest Service proposes to remove timber from 725 acres adjacent to Ledford gap (the range of one pair of golden-winged warblers is about six acres). On approximately 200 acres of the upper slopes and tops of the three ridges in the project area the canopy would be reduced by less than 80 percent, which is described in the project file as “nearly clear cut.” The canopy reduction would range from 40 percent to 70 percent over an additional 400 mid-slope acres and less than 30 percent on the remainder of the project area. After the timber has been removed, the area would be maintained as “open woodland” by means of intensive herbicide application, grass seeding and frequent prescribed burning (every 3-5 years), which is a novel, unproven, extremely costly and open-ended process.

The golden-winged warbler is a good-looking bird, and certainly no one would object to having a few more of them in Georgia. But at what price?

Mixed mesophytic forest. In the 725 acres of the Brawley Mountain project area, the forest varies widely in age and composition, depending on soils, aspect and elevation, as well as when it was last logged in different stands. About a quarter of the area has been logged within the last 25 years, when clear cutting was the preferred method; about another quarter has not been logged for at least 100 years, which probably means that it was never industrially logged, but only selectively. An additional 200 acres is listed in the Forest Service’s data as over 80 years old, and most of this area is mixed mesophytic forest, which “typically (1) has a diverse mix of species, (2) occurs on non-riparian sites that have a cooler and more moist microclimate than other non-riparian communities within the same landscape, and (3) has high or very high productivity” (Final Environmental Impact Statement for the Land and Resource Management Plan, Chattahoochee-Oconee National Forests).

The rich soils and high productivity of this forest were confirmed by a tour of the project area, where Georgia ForestWatch volunteers and staff found stands structurally resembling old growth, with many oak trees (red, white & chestnut) between two and three feet in diameter at breast height and well over 100 feet tall. These trees are just reaching their peak production of acorns, which are a staple food resource for deer, bear, squirrels, turkey and other forest animals. The ecological value of such trees is extremely high, but they also have monetary value as timber. The timber sale and removal of these trees will not only open up the forest but also provide the money to pay for the intensive and very expensive management practices (herbicides, prescribed burning and grass seeding) supposedly needed to enhance golden-winged warbler habitat.

If golden-winged warblers had a monetary value, it would be easy to figure how many mature oak trees each bird is worth, at least in economic terms. Even then, some coefficient would have to be applied to allow for the unknown probability of success of any management practice in increasing their population and the unknown prospects for survival of the population in North Georgia, with or without any management actions. In the absence of such a quantitative criterion, many arbitrary decisions have to be made. From the Forest Service's proposal, it is obvious that they believe the more or less remote possibility of, say, doubling the population, i.e., adding perhaps as many as 12 birds, is worth nearly clear cutting 200 acres of forest, a large part of which closely resembles old growth, and removing more than half the timber, presumably the most valuable, from another 400 acres, much of it highly productive, mixed mesophytic forest.

Of course, this statement of the problem is grossly oversimplified. In reality, it is not a question of golden-winged warbler versus mast-producing oak trees, but one of ecosystems.

To get the Forest Service's side of the story, read the Brawley Mountain Golden-winged Warbler Habitat and Woodlands Restorations Scoping Letter on the Chattahoochee-Oconee National Forests website at <http://www.fs.fed.us/conf/sopa/wildlife-nepa.htm>. To receive an electronic copy of Georgia ForestWatch's response (45 pages), you may request it from info@gawf.org.

If you would like to see the facts on the ground, join me for a hike through the project area on Saturday, April 8. Please call the Georgia ForestWatch office at (706) 635-8733 or Jim Walker at (706) 273-3465 for details.